somes of *Polystichopsis* is smaller than that of the other genera of Aspidiaceae (sensu stricto). Especially *P. miqueliana* has very small chromosomes.

7) Eight species with one variety of *Dryopteris* were studied. *D. crassirhizoma* Nakai and *D. gymnophylla* (Bak.) C. Chr. were known to be diploid species (n=41) (Fig. 16 and 17). *D. scottii* Ching and *D. sparsa* (Ham.) O. Ktze. are tetraploid species (Fig. 18 and 19). These species have 16-celled sporangium. The gametic chromosome number of 123 was found in the three species and one variety, *D. melanocarpa* Hayata, *D. nippoensis* Koidz., *D. championii* (Benth) C. Chr. and *D. erythrosora* var. *prolifica* (Max.) Makino. These species have 8 spore mother cells in a sporangium, and may propagate apogamously (Fig. 20, 21, 22 and 23). Similarly *D. purpurella* Tagawa may propagate apogamously, but this species shows c. 164 bivalent chromosomes at the first meiotic division (Fig. 24).

8) A spore mother cell of *Lastrea omeiensis* (Bak.) Copel. shows c. 136 bivalents in meiosis (Fig. 25). The basic chromosome number of this species may be 34.

9) As to the number of spore mother cells, *Athyrium unifurcatum* (Bak.) C. Chr. has various type of sporangium. Sporogenesis goes to normal only in 8-celled sporangia, and 32 available spores are produced. In this case 120 bivalents are counted (Fig. 26). Sporophytes are produced apogamously.

10) Gametic chromosome number of 34 was counted in *Woodwardia unigemmata* (Mak.) Nakai (Fig. 27). This species has 16-celled sporangia.

11) The spore mother cells of *Crypsinus hastatus* (Thunb.) Copel. showed 35 bivalents in the first meiotic division (Fig. 28). The member of spore mother cells in a sporangium is 16.

12) *Pellaea rotundifolia* (Forst.) Hook. may be a triploid hybrid, for 13 trivalents, 16 bivalent and 16 univalent chromosomes were observed in a mother cell (Fig. 29). *P. flexuosa* (Klf.) Link may be a triploid propagated apogamously, namely 87 bivalents were counted in each spore mother cell in 8-celled sporangia (Fig. 30).

□日本林業技術協会編：**原色日本の林相** Typical Forests in Japan 地球出版社，7000円 1966. 北海道から九州の屋久島にわたる日本各地の代表的な森林と人工林の原色写真が200枚ほどおさめられそのあとに林相の解説がなされている。代表的な森林である大隅のイスノキ林がないことや，もっと森林の特徴を示すよい写真がとれるのでないかと思う所もあるが，日本の森林を理解する上にはよくまとめられている。これをみていると，日本にもずいぶん自然林が残されている印象をうけるが，事実はこうした所が年々急速に姿を消しているのである。 （山崎 敬）